Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-3. (Canceled)

4. (Currently Amended) The ~~implant~~ spinal stabilization device of claim [[1]]24, wherein ~~in the area or areas,~~ the helical recess in the tubular body is configured to provide an elasticity or a movement function ~~is provided in addition to one or more first functions~~.

5. (Currently Amended) The ~~implant~~ spinal stabilization device of claim [[1]]24, wherein the tubular body is configured ~~area or areas are formed with material recesses~~ as at least one of compression zones, expansion zones, torsion zones and as articulated joints.

6. (Currently Amended) The ~~implant~~ spinal stabilization device of claim [[1]]24, wherein the ~~biocompatible material~~ connection element is of a rigid, ~~especially under the intended conditions of use,~~ including a flexurally rigid, material.

7. (Currently Amended) The ~~implant~~ spinal stabilization device of claim [[1]]24, wherein the connection element is formed of a biocompatible material [[is]] selected from [[the]]a group consisting of ~~that comprises~~ titanium and alloys thereof as well as plastics.

8. (Currently Amended) The ~~implant~~ spinal stabilization device of claim [[1]]24, wherein the ~~material~~ helical recess of the flexible tubular body is formed as at least one of a groove-like helical recess and as an open helical aperture of the wall.

9. (Currently Amended) The ~~implant~~ spinal stabilization device of claim [[1]]24, wherein two material recesses are formed on the flexible tubular body as at least one of a groove-like recess and as an open aperture arranged twin-track helically inside each other.

10-11. (Canceled)

12. (Currently Amended) The ~~implant~~ spinal stabilization device of claim [[1]]24, wherein the ~~implant has a tube-like body and, on the ends of the tube-like body, has means~~flexible tubular body has threaded first and second ends configured for connecting to adjacent body parts or other implants or implant parts, with the ~~material recesses~~ helical recess in the ~~tube-like~~ tubular body being provided, such that the implant is compressible and extensible in the axial direction and~~, with reference to the means of connection provided on the ends~~ is bendable about a radial turning axis and torsionable about an axial rotating axis.

13. (Currently Amended) The ~~implant~~ spinal stabilization device of claim [[12]]24 further comprising at least one of a sleeve comprising an elastic biocompatible material surrounding the ~~tube-like~~ tubular body and a core comprising of an elastic biocompatible material.

14. (Currently Amended) The ~~implant~~ spinal stabilization device of claim 13, wherein at least one of the sleeve and the core are held by end plates arranged on the ~~tube-like~~ tubular body.

15. (Currently Amended) The ~~implant~~ spinal stabilization device of claim 13, wherein the elastic material is an elastomer.

16. (Currently Amended) The ~~implant~~ spinal stabilization device of claim [[12]]24, ~~characterized~~ wherein the ~~tube-like~~ tubular body, expressed in terms of its longitudinal direction, is elastically extensible or compressible by 0.5 to 20%.

17. (Currently Amended) The ~~implant~~ spinal stabilization device of claim 12, wherein the ~~tube-like~~ tubular body is elastically bendable about a radial axis, such that the ~~means of connection provided at the~~ threaded first and second ends can pivot by approximately 0.5 to 10°, from the longitudinal axis of the ~~tube-like~~tubular body.

18. (Currently Amended) The spinal stabilization device implant of claim [[12]]24, wherein the ~~tube-like~~ tubular body is torsionable about the axial axis by 0.5 to 10°.

19. (Withdrawn) Method for producing an implant from biocompatible material, especially in accordance with claim 1, from a body with a wall around an axis, characterized by the fact that along the wall around the axis, at least one material recess, especially a helical material recess, is milled in the form of a groove-like or slot-like recess mechanically, chemically or in any other way, especially by laser treatment.

20. (Withdrawn) Method of claim 19, characterized by the fact that two material recesses are milled as groove-like or slot-shaped recesses, such that they are arranged twin-track helically inside each other coaxial to the axis.

21. (Withdrawn) Method of claim 19, characterized by the fact that the body is a solid body, especially a solid cylinder, in which, before or after milling of the material recess (es), a bore hole is incorporated along the axis to generate a hollow body, with especially the remaining wall being narrower than the depth of the groove- shaped recess.

22. (Withdrawn) Implant of claim 19, characterized by the fact that the body is a pipe or a beaker.

23. (Currently Amended) A bone anchoring device for spinal stabilization comprising:

a first bone anchoring element for anchoring to a bone or vertebrae, the first bone anchoring element having a first receptacle;

a second bone anchoring element for anchoring to a bone or vertebrae, the second bone anchoring element having a second receptacle; [[and]]

a connection element configured to connect the first bone anchoring element to the second bone anchoring element, the connection element comprising:

a first rigid part having a first rigid tubular body configured to connect to the first bone anchoring element, the first rigid tubular body ~~part~~ having a first connection end configured to be received in the first receptacle and at least one opposing threaded end;

a second rigid part having a second rigid tubular body configured to connect to the second bone anchoring element, the second rigid tubular body ~~part~~ having a second connection end configured to be received in the second receptacle and at least one opposing threaded end;

a flexible part having a first threaded end and a second threaded end defining a length of the flexible part and comprising a tubular body having a helical recess; and

wherein the first threaded end of the flexible tubular body ~~part~~ is configured to connect to the at least one threaded end of the first rigid tubular body ~~part~~, and wherein the second threaded end of the flexible tubular body ~~part~~ is configured to connect to the at least one threaded end of the second rigid tubular body ~~part~~; and

a space holder for replacing a spinal disc or vertebrae adjacent to the connection element, the space holder having a tubular body with a flexible section having a helical recess.

24. (New) A spinal stabilization device comprising:

a first bone anchoring element for anchoring a bone or vertebrae, the first bone anchoring element having a first receptacle;

a second bone anchoring element for anchoring to a bone or vertebrae, the second bone anchoring element having a second receptacle;

a connection element configured to connect the first bone anchoring element to the second bone anchoring element with the connection element being received in the first receptacle and the second receptacle, the connection element comprising:

a first rigid part namely a first rigid tubular body configured to connect to the first bone anchoring element,

a second rigid part having a second rigid tubular body configured to connect to a second bone anchoring element, and

a flexible part having a flexible tubular body with a helical recess, the flexible tubular body being arranged between the first rigid part and the second rigid part, and

a space holder for replacing a spinal disc or vertebrae adjacent to the connection element, the space holder having a tubular body with a flexible section having a helical recess.

25. (New) The spinal stabilization device of claim 24, wherein the first rigid part has an external diameter different from an external diameter of the second rigid part.

26. (New) The spinal stabilization device of claim 25, wherein the flexible tubular body has a first end and an opposing second end, wherein at least one of the ends is a threaded end provided with internal threads on an inner surface of the flexible tubular body, wherein at least a portion of the threaded end overlaps along the longitudinal axis with a portion of the tubular body with the helical recess.

27. (New) The spinal stabilization device of claim 26, wherein the internal threads extend along substantially an entire length of the inner surface of the tubular body.

28. (New) The spinal stabilization device of claim 26, wherein the helical recess extends along an entire length of the tubular body from the first end to the opposing second end.

29. (New) The spinal stabilization device of claim 24, wherein tubular body of the space holder has a tubular wall defining a plurality of holes through the wall, wherein the helical recess of the space holder is separate from the plurality of holes, the tubular body of the space holder further including a first end portion configured to engage a body part and a second end portion configured to engage an adjacent body part.

30. (New) The spinal stabilization device of claim 29, wherein the first end portion and the second end portion comprise projections.

31. (New) The spinal stabilization device of claim 30, wherein said projections have serrations for engagement with adjacent body parts.

32. (New) The spinal stabilization device of claim 31, wherein said projections are triangular.

33. (New) The spinal stabilization device of claim 31, wherein said projections are trapezoidal.

34. (New) The spinal stabilization device of claim 29, wherein at least one of the first end portion and the second end portion is a continuous one-piece extension of the tubular body of the space holder.